

## General

### Title

HIV diagnostic testing: percentage of exposed infants born to HIV-infected women who received recommended virologic diagnostic testing for exclusion of HIV infection in the measurement year.

### Source(s)

Health Resources and Services Administration (HRSA). HAB HIV performance measures: pediatrics. Rockville (MD): Health Resources and Services Administration (HRSA); 2010 Aug 19. 30 p.

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of exposed infants born to human immunodeficiency virus (HIV)-infected women who received recommended virologic diagnostic testing for exclusion of HIV infection in the measurement year.

### Rationale

Human immunodeficiency virus (HIV)-related morbidity and mortality has dropped dramatically due to advances in HIV/acquired immune deficiency syndrome (AIDS) treatment. But reductions are uneven across HIV-infected populations due to unequal access to care and variable quality of services provided. Quality management seeks to enhance the quality of HIV care provided and increase access to services. They do so by measuring how health and social services meet established professional standards and user expectations.

HIV virologic testing should be performed at a minimum at ages 14 to 21 days, 1 to 2 months and 4 to 6

months.

Antibiotic prophylaxis against *Pneumocystis jirovecii* pneumonia (PCP) is recommended for infants with indeterminate HIV infection starting at 4 to 6 weeks of life or until they are determined to be uninfected. Diagnostic testing allows PCP prophylaxis to be avoided or stopped if confirmed uninfected (Working Group on Antiretroviral Therapy and Medical Management of HIV-Infected Children, 2010).

#### U.S. Public Health Guidelines

"HIV infection should be diagnosed using HIV deoxyribonucleic acid (DNA) polymerase chain reaction (PCR) or ribonucleic acid (RNA) virologic assays. Maternal HIV antibody crosses the placenta and will be detectable in all HIV-exposed infants up to 18 months of age; therefore standard antibody tests should not be used for HIV diagnosis in newborns. HIV virologic testing should be performed at a minimum at ages 14 to 21 days, 1 to 2 months, and 4 to 6 months. Some experts also perform a virologic test at birth, especially if the woman has not had good virologic control during pregnancy or if adequate follow-up of the infant may not be assured. A positive HIV virologic test should be confirmed as soon as possible with a second HIV virologic test on a different specimen. Two positive HIV tests constitute a diagnosis of HIV infection" (Working Group on Antiretroviral Therapy and Medical Management of HIV-Infected Children, 2010).

Definitive exclusion of HIV infection in nonbreastfed infants may be based on two negative virologic tests at greater than or equal to 1 month and greater than or equal to 4 months of age (Working Group on Antiretroviral Therapy and Medical Management of HIV-Infected Children, 2010).

## Evidence for Rationale

Health Resources and Services Administration (HRSA). Deliver HIV/AIDS care: quality of care. [internet]. Rockville (MD): Health Resources and Services Administration (HRSA); [accessed 2016 Jun 23].

Health Resources and Services Administration (HRSA). HAB HIV performance measures: pediatrics. Rockville (MD): Health Resources and Services Administration (HRSA); 2010 Aug 19. 30 p.

Working Group on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the use of antiretroviral agents in pediatric HIV infection. Bethesda (MD): Department of Health and Human Services (DHHS); 2010 May 24. various p.

## Primary Health Components

Human immunodeficiency virus (HIV); virologic diagnostic testing; infants

## Denominator Description

Number of human immunodeficiency virus (HIV)-perinatally exposed infants who:

- Were 6 to 12 months of age at any point in the measurement year; and
- Who had a medical visit with a provider with prescribing privileges at least once in the measurement year

See the related "Denominator Inclusions/Exclusions" field.

## Numerator Description

Number of human immunodeficiency virus (HIV)-perinatally exposed infants who had at least two virologic diagnostic tests performed at appropriate time points by age of six months to definitively exclude HIV infection (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

### Additional Information Supporting Need for the Measure

Unspecified

### Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

### Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Age between 6 and 12 months

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Health and Well-being of Communities

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Staying Healthy

## IOM Domain

Effectiveness

Timeliness

# Data Collection for the Measure

## Case Finding Period

The measurement year

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

Number of human immunodeficiency virus (HIV)-perinatally exposed infants who:

Were 6 to 12 months of age at any point in the measurement year; and  
Who had a medical visit with a provider with prescribing privileges at least once in the measurement year

Note:

A "provider with prescribing privileges" is a health care professional who is certified in his/her jurisdiction to prescribe medications. Refer to the original measure documentation for additional data elements.

Exclusions

Patients who were newly enrolled after six months of age  
Patients diagnosed with HIV infection

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

Number of human immunodeficiency virus (HIV)-perinatally exposed infants who had at least two virologic diagnostic tests performed at appropriate time points\* by age of six months to definitively exclude HIV infection

\**Definitive* exclusion of HIV infection in a nonbreastfed infant is based on two or more negative virologic tests, with one obtained at age greater than or equal to 1 month and one at greater than or equal to 4 months.

Exclusions

Unspecified

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Registry data

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

### Measure Specifies Disaggregation

Does not apply to this measure

### Scoring

Rate/Proportion

### Interpretation of Score

Desired value is a higher score

### Allowance for Patient or Population Factors

not defined yet

### Standard of Comparison

not defined yet

## Identifying Information

### Original Title

Diagnostic testing to exclude HIV infection in exposed infants.

### Measure Collection Name

HIV/AIDS Bureau (HAB) Performance Measures

### Measure Set Name

## Submitter

Health Resources and Services Administration - Federal Government Agency [U.S.]

## Developer

Health Resources and Services Administration - Federal Government Agency [U.S.]

## Funding Source(s)

Unspecified

## Composition of the Group that Developed the Measure

Unspecified

## Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2010 Aug

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

## Measure Availability

Source available from the [Health Resources and Services Administration \(HRSA\) Web site](#)

For more information, contact the HRSA HIV/AIDS Bureau (HAB) at 5600 Fishers Lane, Rockville, MD

## NQMC Status

This NQMC summary was completed by ECRI Institute on July 8, 2016.

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## Production

## Source(s)

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